

## **Appendix D**

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# **Flowcharts of Rule Requirements**

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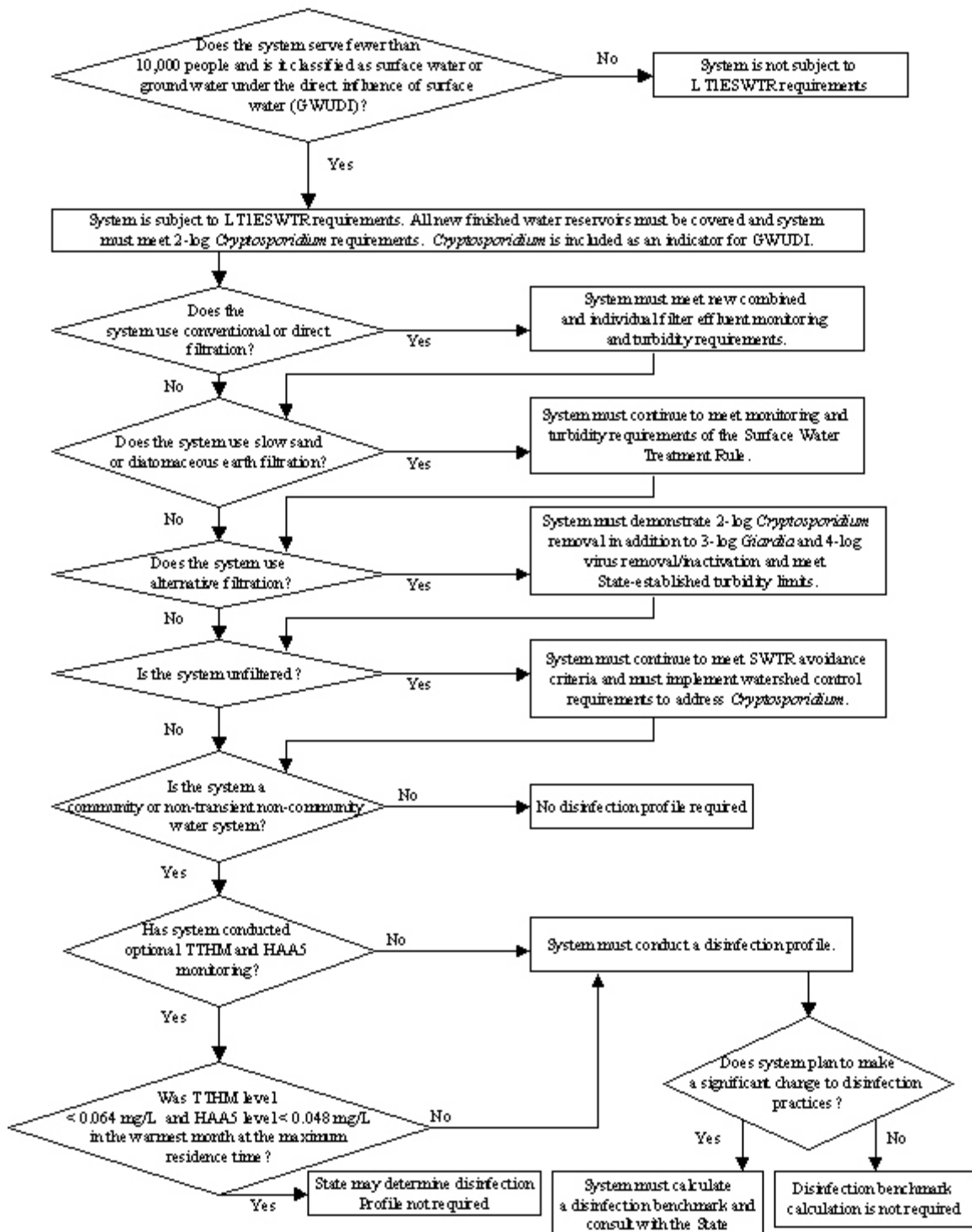
## **Implementation Flowchart Index**

### **LT1ESWTR**

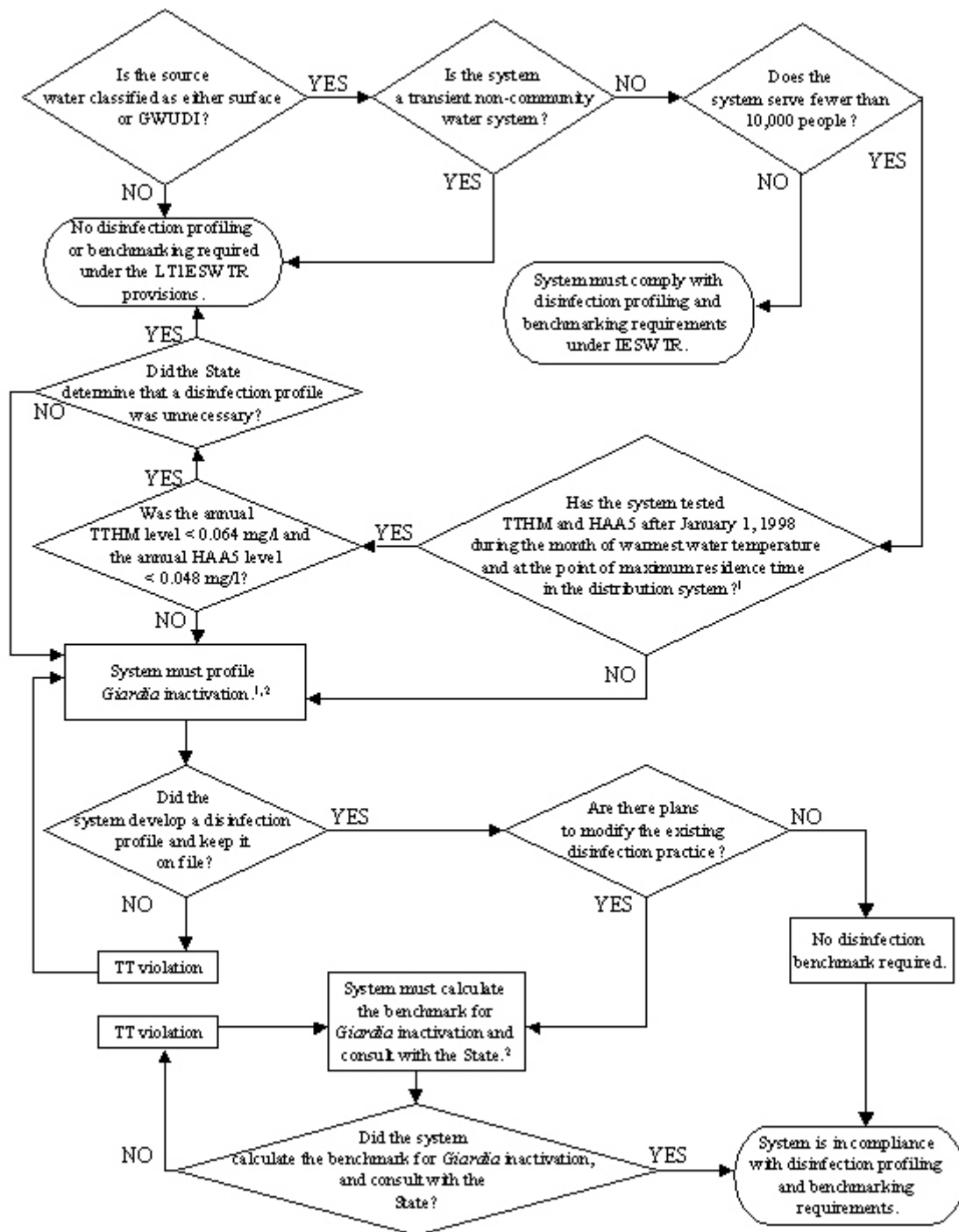
The following flowcharts are provided as a guide to the Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) based on the Federal requirements. They do not include all the exceptions to the LT1ESWTR that may apply. In addition, since State requirements may be more stringent than the Federal requirements, systems should consult with their States regarding State-specific requirements.

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- LT1ESWTR Disinfection Profile and Benchmark Decision Tree
- Combined Filter Effluent (CFE) Turbidity Provisions of the LT1ESWTR For Systems Using Conventional or Direct Filtration
- Individual Filter Effluent (IFE) Turbidity Provisions of the LT1ESWTR For Systems Using Conventional or Direct Filtration
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- Combined Filter Effluent (CFE) Turbidity Provisions of the LT1ESWTR For Systems Using Alternative Filtration Technologies

## General Requirements of the LT1ESWTR



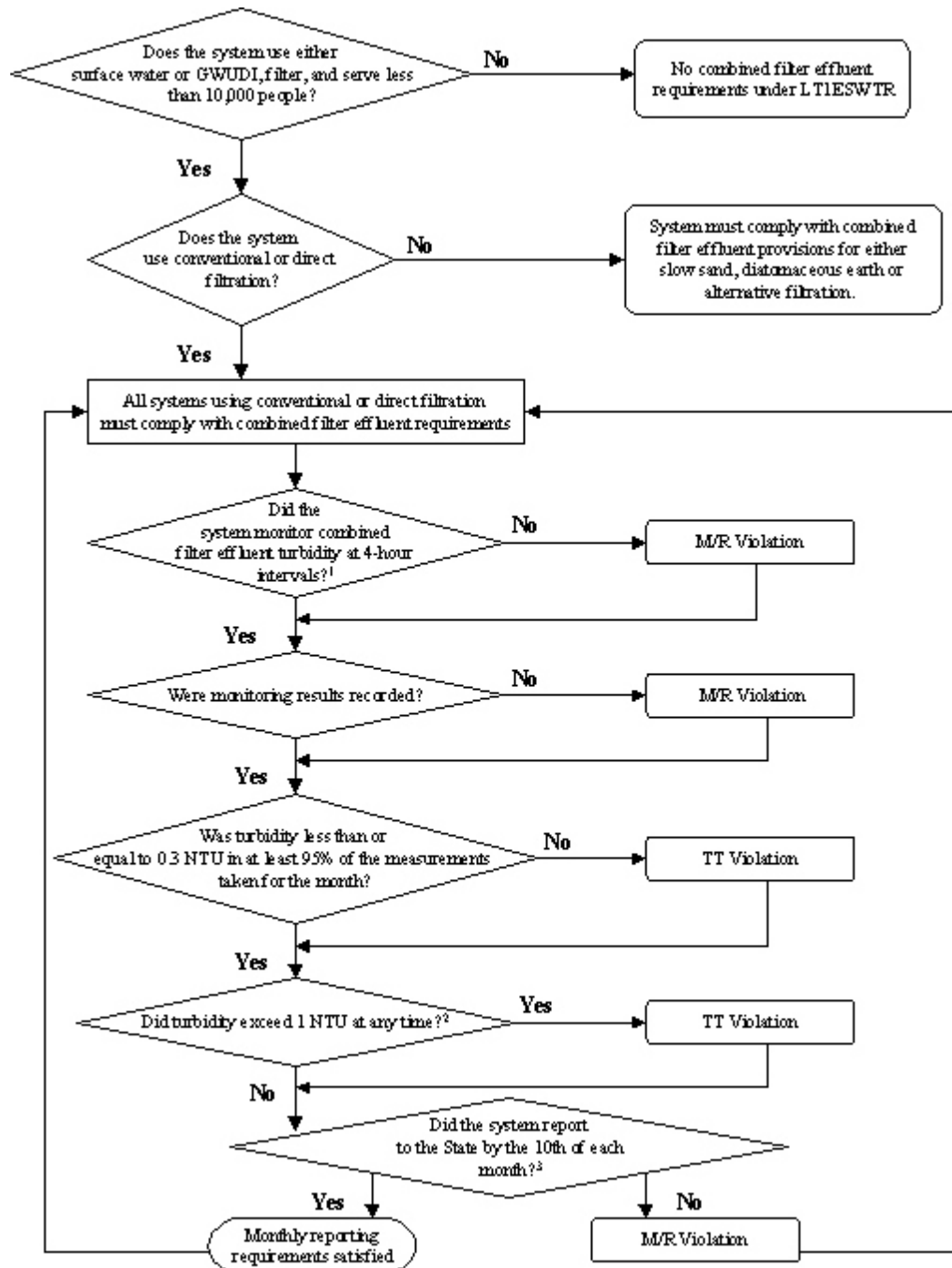
## LT1ESWTR Disinfection Profile and Benchmark Decision Tree



1. If using chlorine dioxide, ozone, or chloramines as a primary disinfectant, the system must profile and/or benchmark viral inactivation as well.

2. Disinfection profile must be kept on file for State to review during sanitary survey.

## Combined Filter Effluent (CFE) Turbidity Provisions of the LT1ESWTR For Systems Using Conventional or Direct Filtration



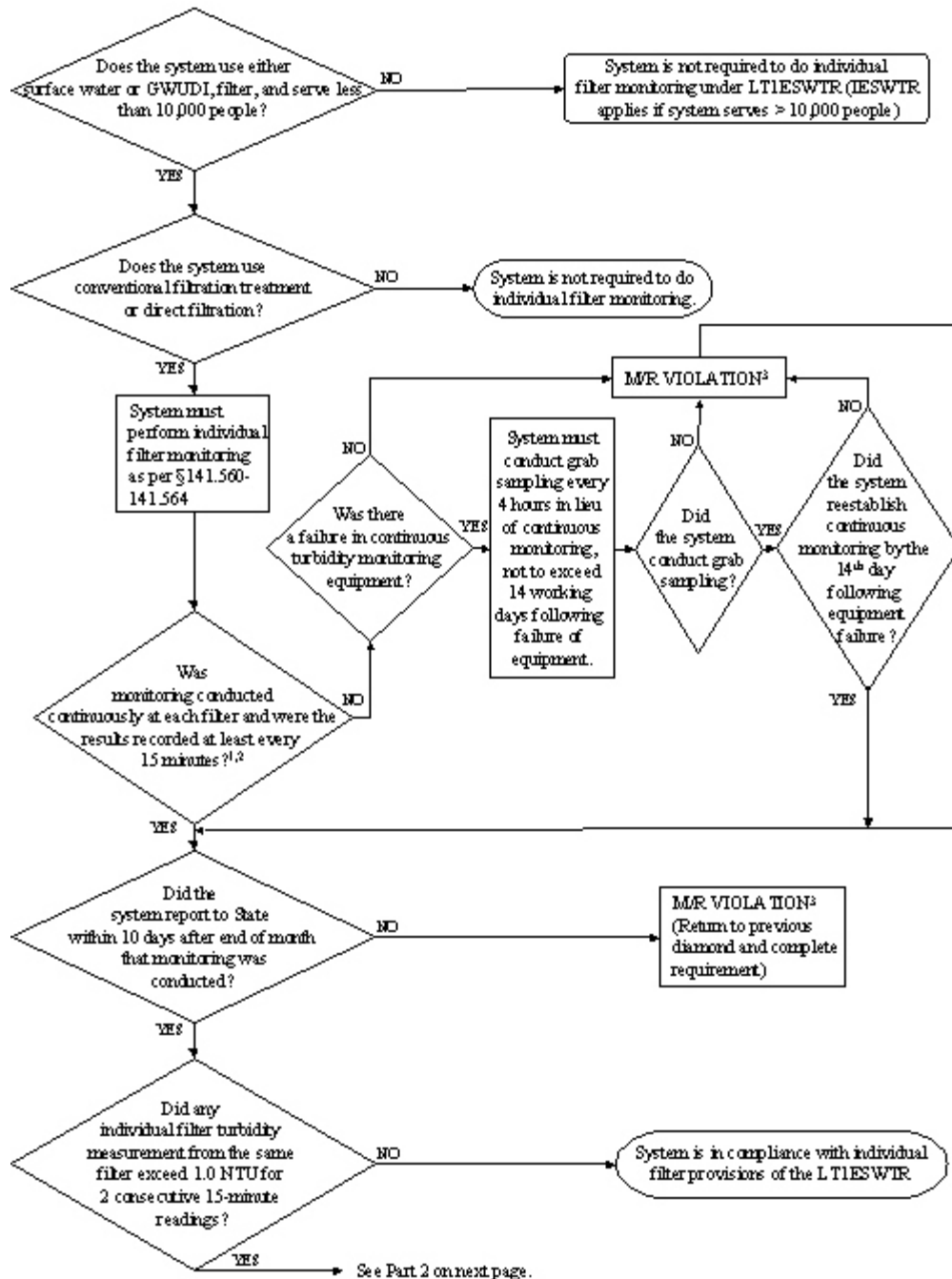
1. As per the SWTR, §141.74 (c) (1), the State may reduce this monitoring frequency to one sample per day for systems serving 500 or fewer people.

2. System must notify State within 24 hours of exceedance in accordance with the Public Notification Rule.

3. Systems must report the total number of CFE turbidity measurements taken during the previous month, the number and percentage of turbidity measurements that were less than or equal to 0.3 NTU, and date and value of any turbidity measurements exceeding 1 NTU.

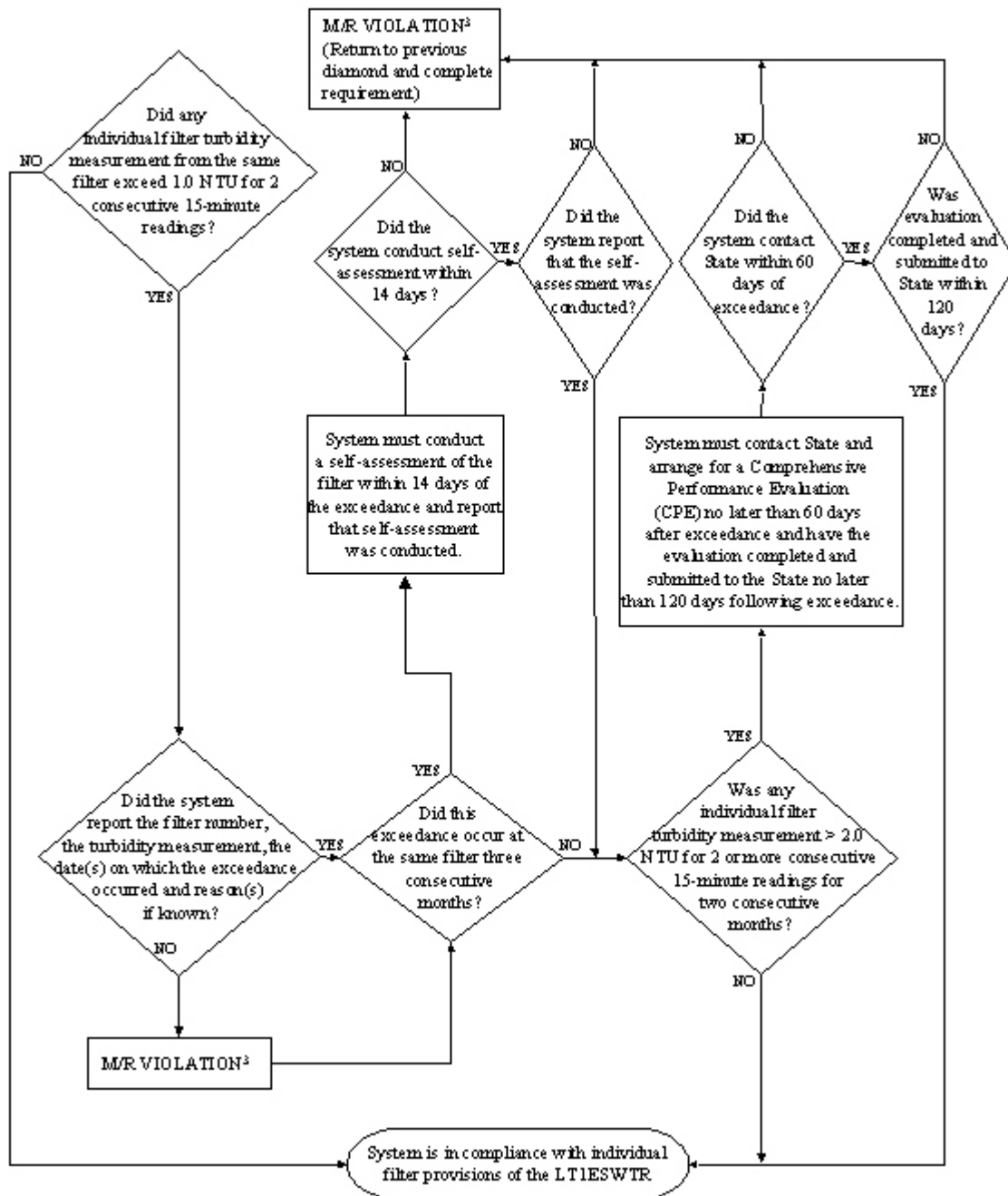
# Individual Filter Effluent (IFE) Turbidity Provisions of the LT1ESWTR For Systems Using Conventional or Direct Filtration

## Part 1: IFE Monitoring Provisions



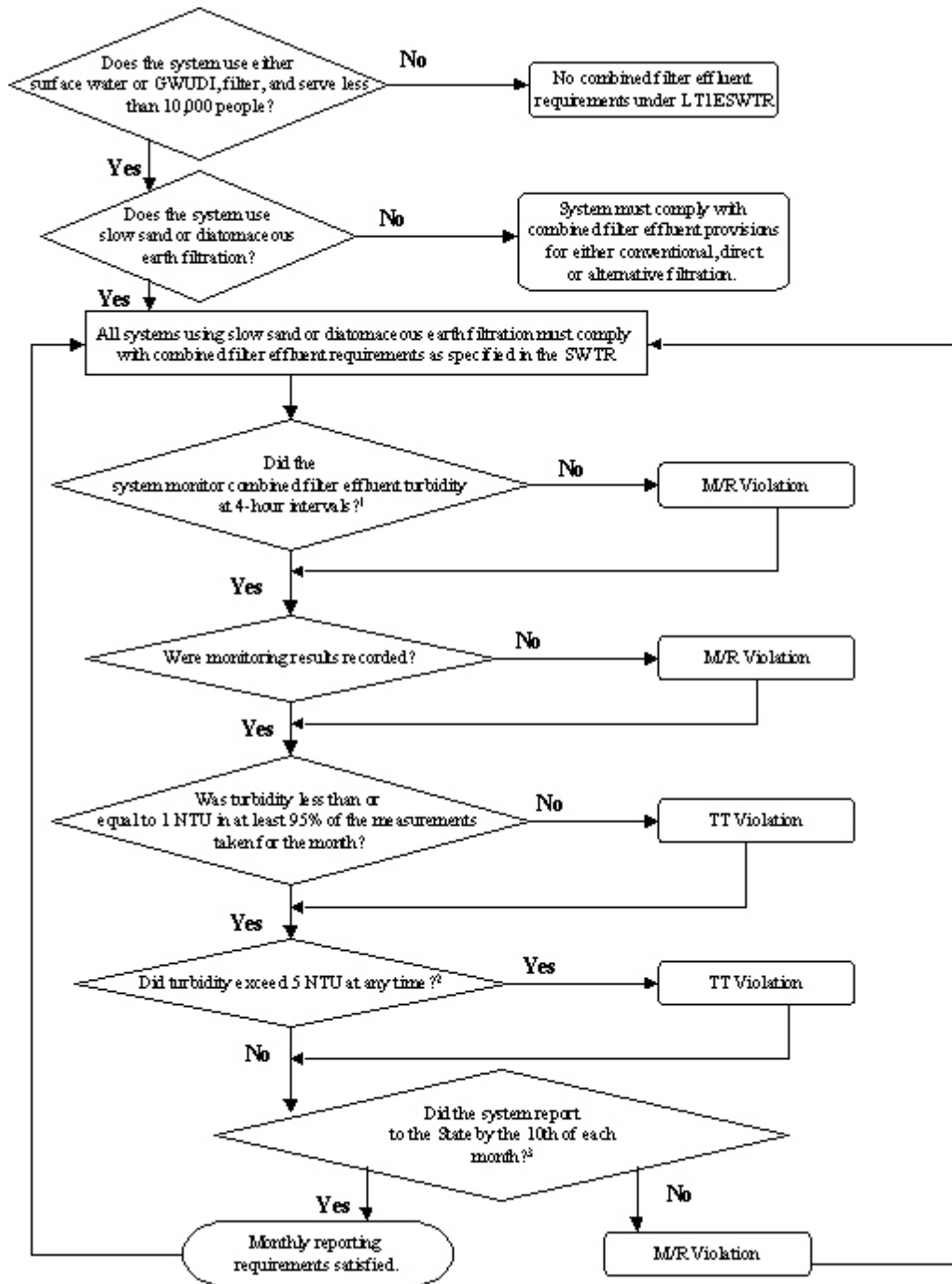
1. Systems with only two filters may continuously monitor combined filter effluent instead of monitoring individual filter effluent. Systems with one filter must continuously monitor filter effluent every 15 minutes. Results must be recorded at least every 15 minutes.
2. Monitoring must be conducted using an approved method in §141.74(a). Calibration of turbidimeters must be conducted using procedures specified by the manufacturer.
3. System has M/R violation until the relevant requirement is completed (such as conducting a filter self-assessment).

For Footnotes, please see previous page.





## Combined Filter Effluent (CFE) Turbidity Provisions of the LT1ESWTR For Systems Using Slow Sand or Diatomaceous Earth Filtration

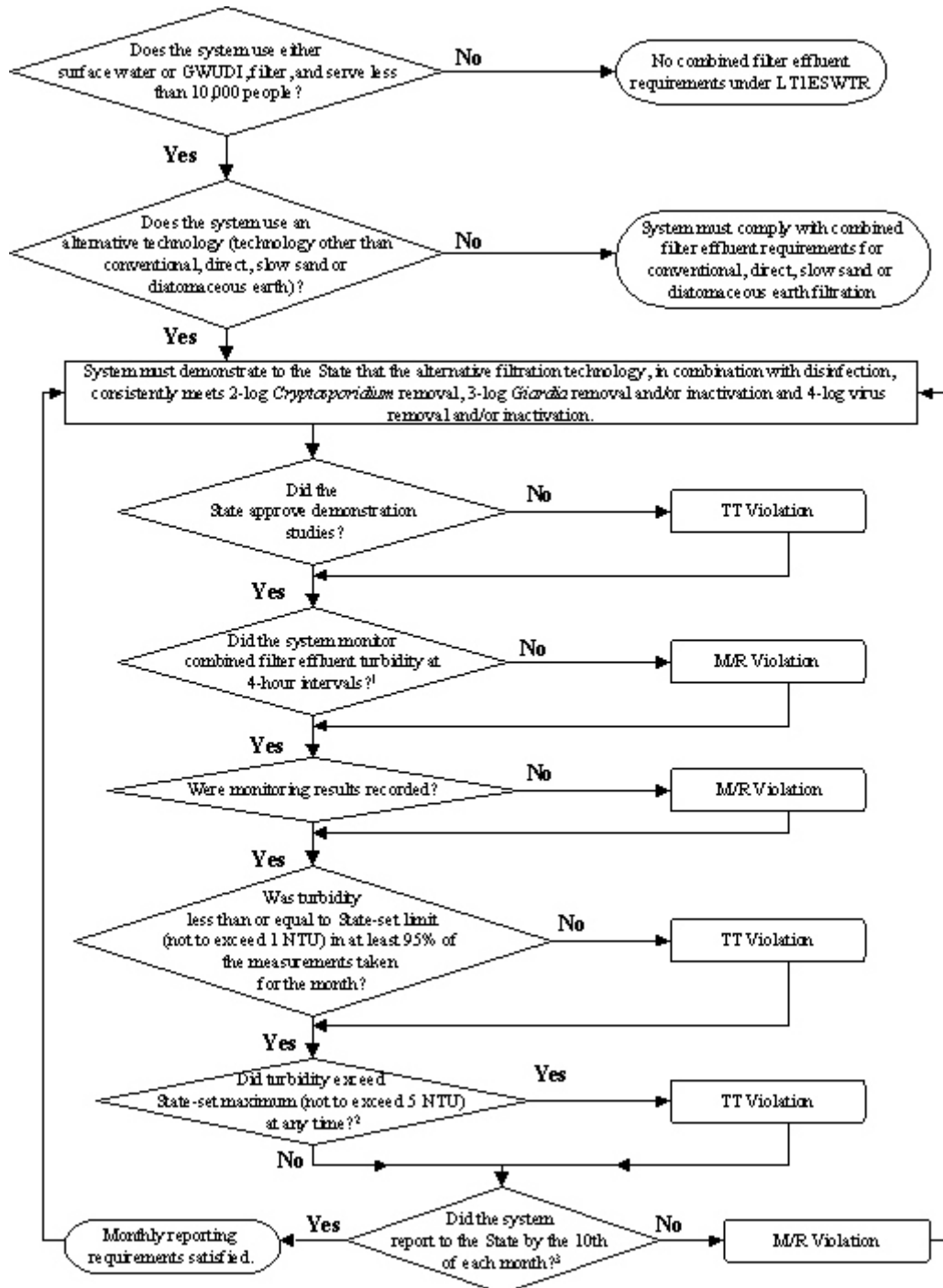


1. As per the SWTR, §141.74 (c) (1), the State may reduce this monitoring frequency to one sample per day for any systems using slow sand filtration or for systems using diatomaceous earth filtration serving 500 or fewer people.

2. System must notify State within 24 hours of exceedance in accordance with the Public Notification Rule.

3. The total number of turbidity measurements taken during the previous month, the number and percentage of turbidity measurements that were less than or equal to 1 NTU, and date and value of any turbidity measurements exceeding 5 NTU.

## Combined Filter Effluent (CFE) Turbidity Provisions of the LT1ESWTR For Systems Using Alternative Filtration Technologies



1. As per the SWTR, §141.74 (c) (1), the State may reduce this frequency to one sample per day.

2. System must notify State within 24 hours of exceedance in accordance with the Public Notification Rule.

3. The total number of turbidity measurements taken during the previous month, the number and percentage of turbidity measurements that were less than or equal to the State-set limit (not to exceed 1 NTU), and date and value of any turbidity measurements exceeding the State-set maximum value (not to exceed 5 NTU).